

Title (en)
Precision depth spindle.

Title (de)
Feinbohrspindel.

Title (fr)
Broche de forage précise.

Publication
EP 0584412 A1 19940302 (EN)

Application
EP 92307733 A 19920825

Priority
• EP 92307733 A 19920825
• CA 2076335 A 19920818
• US 93380692 A 19920824

Abstract (en)
A precision depth spindle (56) is mounted to rotate within a cartridge (34) but is restrained against axial movement with respect to the cartridge (34). The cartridge (34) is mounted for axial sliding movement within a housing (22), but cannot rotate with respect to the housing (22). A tool chuck (80) is fixed to one end of the spindle (56) for movement with the spindle (56), the tool chuck (80) supporting a cutting tool (10). A spindle stop (112) is mounted to the tool chuck (80) and can rotate with respect to the chuck (80). This allows the spindle stop (112) to be maintained stationary while the tool chuck (80) and the cutting tool (10) rotate. The spindle stop (112) is finely adjustable axially with respect to the tool chuck (80), thus determining the depth to which the cutting tool (10) will enter a workpiece. The cartridge (34) has a limited axial motion range with respect to the housing (22), and both the spindle (56) and cartridge (34) are urged toward the workpiece with respect to the housing (22) by a suitable spring or pressure means.
<IMAGE>

IPC 1-7
B23Q 1/08; **B23Q 16/00**; **B23Q 3/06**; **B23B 49/00**; **B23Q 17/22**

IPC 8 full level
B23B 49/00 (2006.01); **B23Q 1/70** (2006.01); **B23Q 3/06** (2006.01); **B23Q 16/00** (2006.01); **B23Q 17/22** (2006.01)

CPC (source: EP US)
B23B 49/008 (2013.01 - EP US); **B23Q 1/70** (2013.01 - EP US); **B23Q 3/069** (2013.01 - EP US); **B23Q 16/001** (2013.01 - EP US); **B23Q 16/005** (2013.01 - EP US); **B23Q 17/225** (2013.01 - EP US); **Y10T 408/173** (2015.01 - EP US); **Y10T 408/18** (2015.01 - EP US); **Y10T 408/385** (2015.01 - EP US); **Y10T 408/99** (2015.01 - EP US); **Y10T 409/30672** (2015.01 - EP US)

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